

### 3. On the Antelopes of the Aures and Eastern Algerian Sahara. By ALFRED E. PEASE<sup>1</sup>.

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In the following notes I shall confine myself to the Antelopes of those regions of Algeria which are comprised between the Aures Range and the borders of the countries inhabited by the Chaamba and Touareg tribes of the Sahara. Although much of my time during the years 1892, 1893, 1894, and 1895 was devoted to hunting the Barbary Wild Sheep, I shall consider this, which is in my opinion the most interesting of all the North-African wild animals, outside the scope of this paper. However, in passing, I might be allowed to say that M. Fourean, in the spring of 1895, assured me that he had found this Sheep in great numbers in the mountain-ranges of those districts he had explored in the countries of the Touaregs, and that those he had shot were identical in appearance with specimens of the Atlas and Aures and El Goléa mountains in the south, though he believed they were smaller in size. At the same time he asserted that he had made a discovery so at variance with all preconceived ideas of the habitat of the Red Deer (Arab *Fortassa* or *Mustarb*), and which he regarded as "*une chose si bizarre*," that he almost hesitated, in regard for his own reputation, to make it known. His discovery was this, that he had convinced himself of the existence of *Cervus barbarus* in certain of these districts of the Ahaggar between the marshy jungles and the mountains. The only places that I know of where the Barbary Deer still lingers in N. Africa is to the E. of Tebessa and in the forests to the north of Gafsa in Tunisia, where happily it has been placed under the protection of the French Departments of Forests. The horns that I have seen from these districts lead me to believe that the Tunisian Deer is inferior in point of size to the European Red Deer. The Buffalo is still to be found in the marshes near Biserta, and is also under protection, one native Kaid alone having the right to hunt them.

The Bubal (*Bubalis buselaphus*) is now extinct in the Province of Constantine, and very rare indeed in Tunisia and in Oran. In a journey made in 1895 through the Djereed and into the Tunisian Aures I not only never saw one, but never could obtain any but the most uncertain accounts of where they could be found. If I returned to that country I should search for them in the neighbourhood of Donz and the Dahar district. In 1738, according to Shaw, "these kingdoms" (*i. e.*, the Barbary States, Eastern Province) "afforded large herds of the Neat kind called *Bekker el Wash* by the Arabs. This species," he goes on to say, "is remarkable for having a rounded turn of body, a flatter face, with horns bending more towards each other than the tame kind."

The term *Beyra el Ouash* (Wild Cow) is indiscriminately used by the Arabs for both the Bubal and Addax, and travellers should

<sup>1</sup> Communicated by the Secretary.

bear this in mind in making enquiries. The Arabs, however, use the word "*Meha*" exclusively for the Addax, though probably the general run of natives are unacquainted with this name.

The Addax (*Addax naso-maculatus*), called by the French "Antilope du Sud," by the Arabs "*Begra el Ouash*" or "*Meha*," and by the Touaregs "*Tamita*" (or *Tameeta*), has been so often described that I will not attempt any description of it myself, but simply give such information as to its habitat and habits as I have been able to gather whilst travelling in the Sahara and residing at Biskra.

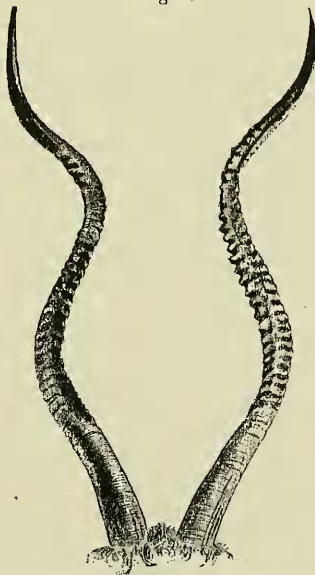
I do not know of any good complete specimen in any museum, nor have I been able to obtain one myself, though, along with Sir Edmund Loder, I made one good bid to reach the confines of those countries where it is to be found in great numbers. In February 1895, furnished with all the information I could obtain from M. Foureau and natives familiar with the Erg, we started from Biskra to reach the country between El Oued Souf and Rhadamis. After a week's journey across the desert by way of the great Chotts we reached the Oued Souf. At El Oued, the last outpost of the French in the direction of Rhadamis, we were stopped till Capitaine de Prandière obtained instructions from the General of Division permitting us to go on. After a detention, made pleasant by the great kindness and hospitality of the three French officers in command of the native garrison, we had the disappointment of being told that we could not be allowed to proceed southwards. At the time we thought this very hard, for though we were aware that the Touaregs had lately raided the Chambas as near as Mey, we felt that a flying visit to the country east of Bir Beresof would be without danger, as we could be in and out again before our presence was discovered. But a few months later M. Foureau and a strong force were driven back from the south, though he had reached a point far beyond our proposed destination, and I think our hosts were entirely justified in their refusal. Our plan had been to reach Bir Beresof, and then to strike east for Bir Aouen, where we should in all probability have come up with the Addax, which visits this district in large quantities in favourable years. The Addax country is the Erg, the great region of sand-dunes covered more or less thickly with vegetation according to situation and rains. This sand-dune country covers hundreds—it may be said thousands—of miles and the Addax follows the rains. In certain districts it is not uncommon for rain not to fall for several years in succession. In one year the Addax are only found far south of Rhadamis and Aïn Taïba (S. of Ouargla), in other years they follow the rain as far north as the southern borders of the Chott Djereed in the east and the neighbourhood of Aïn Taïba in the west. Without the help of the French and a good escort of Chambas it would be vain to attempt to reach the Rhadamis country by way of Bir Beresof; and the wells being sometimes nine days apart, it is a difficult route to follow.

I heard when at Touzer that a M. Cornex had obtained a

"*Begra el Ouash*" within a few days of Douz; possibly this was the Bubal, though I was assured that he had got the Addax. M. Cornex (a Swiss) had adopted the religion and dress of the Arabs, and had therefore facilities of reaching places and avoiding dangers that were quite exceptional.

In 1894 the Touaregs raided as far north as the southern shores—if they can be called shores—of the Chott Djereed. In 1895 we crossed the western end of this Chott, and, so as far as we could judge or learn, the Chott was without water in any part; it had been an exceptionally dry year, and the country between the mountains and the Djereed we found absolutely devoid of inhabitants.

Fig. 1.



Horns of "Addax": front view.

At El Oued there was in the fort a tame Addax familiarly called "*Begra*," and this was the only living specimen we saw during our journey. It was not a very good example, but had rather a fine pair of horns. It had been presented by some Chambas to the Commandant.

The best and strongest horns I know are a pair I purchased from an Arab who had come to Biskra *vid* Ouargla (see fig. 1, p. 811). They measure  $34\frac{1}{2}$  inches in length,  $6\frac{1}{2}$  in. round the base;  $17\frac{1}{2}$  in. between the tips, and  $12\frac{1}{2}$  in. between the horns at the lower outward curve.

The Chambas who have firearms shoot a great many of these Antelopes, and assure me that when there is a wind sufficiently strong to make the grass, broom (*Genista monosperma*?), and bushes wave, it is very easy to get them. They told me that they could easily take me where they were "like flies," and where I could get as many as ever I wished.

The Tonaregs hunt the Begra el Ouash or "Tamita" with Sloughia (Greyhounds—the Saharian Greyhound is called a "sloughi" by the Arabs). The sloughia bring it quickly to bay, and the men go in and spear it.

Algeria and the Northern Sahara yield three distinct kinds of Gazelles (I know nothing of *Gazella rufina*). Old works which allude to these species are most confusing, and it is often impossible from their descriptions and names to know to which their remarks refer.

Shaw's accounts, so far as they go, of the wild animals of the Barbary States are comparatively clear. In alluding to the Gazelles, he says:—

"Besides the common Gazelle or Antelope" (i. e. *Gazella dorcas*) " (which is well known in Europe) this Country likewise produceth another Species of the same Shape and Colour, though of the Bigness of our Roe-Buck and with Horns sometimes of two foot long. This the Africans call Lidmee (i. e. the *Admi* or *Gazella cuvieri*), and may, I presume, be the *Strepsiceros* and *Addax* of the Antients . . ."

It is usual to regard the *Dorcas* as the "common Gazelle," but I have no doubt whatever that the Rhime (*G. loderi*) is by far the most numerous species in North Africa, and to be found over a very much more extended area than the *Dorcas*. The description given in the 'Proceedings' of this Society (1894, pp. 467-473) of the Algerian Gazelles is so complete that I shall confine myself to a very brief notice of the three species that I am familiar with.

(1) The *Dorcas* (*Gazella dorcas*), called by the Arabs generally "*Rhozal*," but when exactness is required "*Hemar*." They regard a large *Dorcas* as one of a separate race, and he is called *Bou Khrouma* (Large Throat), but the *Bou Khrouma* and *Hemar* are both alike the *Dorcas* Gazelle. The French discriminate between the *Dorcas* and the Rhime (*G. loderi*) by terming the former "*Gazelle des Plaines*," and the latter "*Gazelle des Sables*."

It is with great respect and diffidence that I object to the *Dorcas* being described (see P. Z. S. 1894, p. 467) as "the common Gazelle of the Algerian Sahara generally," for the *Dorcas* is not met with in the Sahara proper, so far as I can learn, and in the Eastern Algerian Sahara at least is not to be found south of lat. 33°. The *Dorcas* in the Eastern Province and in Tunisia is the common Gazelle of the plains immediately south of the Aures

Range, which form a sort of transitional zone between the mountains and the Sahara proper. Roughly speaking, this Gazelle is confined to a belt of country not more than 120 or 150 miles wide (and generally very much narrower). It may be found in plains, or even in low hills, within the southern mountain-chains, and on or near some of the sand-dunes on the confines of the Chotts. I have frequently seen it in the neighbourhood of the Chotts, but once into the Oued Souf and sand desert and all trace of it is lost and the Rhime takes its place. In the district of Sef el Menadi, where I have been twice with Sir E. G. Loder, and where he secured the first specimen of the Gazelle (the Rhime) which now bears his name, we found both Rhime and Dorcas on the same ground; and this place may be marked as the most northern limit which the Rhime ever inhabits, as it never leaves the sand, I think, whilst the Dorcas does not go much further south than this. Probably there are several of these isolated islands of sand where the Rhime may be found.

The best male Dorcas that I have shot had horns a little over 31 cm. in length, the best female 25 cm. (measured along the curve).

They vary a good deal in colour according to the ground they frequent, and there is a slight variety among members of the same band. In 1893 there was on the plain of Aïn Naga a pure white one, no doubt an albino; but though my hunter had frequently seen it, he was never able to find it for me.

(2) The Rhime (*Gazella loderi*), Arab "*El Rhime*," Tamahaq "*Hankut*," is the common Gazelle of the Sahara. Enormous numbers are killed by the Arabs in the neighbourhood of Rhadamis, and their skins dressed and dyed with a dye made from the rind of pomegranates and exported from Rhadamis. They are to be found throughout the region of the great Ergs and everywhere in the Sahara sands where there is vegetation sufficient to support them. The only places where they are to be met with, I believe, north of El Oued Souf, are to the south-west of Bou Chaama and near Sef el Menadi. A number of their horns are always on sale at Biskra and sometimes the skins. The male horns of the Rhime sometimes bear so close a resemblance to those of the Admi (*Gazella cuvieri*) that they are often sold and bought as such. The Admi horns are much less commonly seen than the Rhime; as a rule, they are to be distinguished. The general character of the Rhime horns as distinguished from the Admi are, so far as I can describe them, as follows:—

In the Rhime among average specimens the horns form in *their main outline* a long evenly-tapering V, whilst in the Admi the horns so far up from their base are more inclined to the parallel before springing out laterally, and towards the points usually take an inward and forward turn; this turn inward is rarer, though not uncommon, in the Rhime, but the forward bend at the top is common to both.

I have remarked, too, that the annulations or notches are as a

rule, deeper and more marked in the Admi, and stop more abruptly towards the points of the horns than is the case with the Rhime, which gradually fade into the smooth points.

Fig. 2.



Horns of "Rhime."

Fig. 2.



Horns of "Admi."

I think it will be found also that the line of annulations in the Rhime is generally horizontal or depressed from front to back, while in the Admi this line tends upwards. Besides this I have nothing more to add to the very full description of the *Gazella loderi* in the 'Proceedings,' by Mr. Thomas and Sir E. G. Loder. My best Rhime horns measure barely 35 cm. along the curve.

(3) The Admi (*Gazella cuvieri*) is known as *Admi*, *l'Admi*, or *l'Edmi* to the Arabs; it is also distinguished from the Dorcas "*Rhozal*" as "*Rhozal Djebel*" (Mountain Gazelle).

This Gazelle is by no means so rare as is generally supposed, though it is difficult to secure, its quickness and facility for eluding observation being equal almost to that of the Larrowi (*Ovis tragelaphus*). There is hardly a mountain in the southern ranges of the Aures where they are unknown, and I have seen them on almost every mountain from far to the N.W. of Biskra to the Tunisian frontier at Negrine. I know that they are common on the Djebel Cherchar, and I have seen them as far north as the hills and woods of Melagon, near Chelia. I have seldom seen more than eight in a herd, and far more frequently they are met with singly and in pairs, or bands of three to five. While frequenting the same difficult ground as the Larrowi, it is more usual to find them in larger numbers on those mountains which are lower than the highest. I have seen them on the plateaux and plains among the mountains, and they frequently descend at night to feed on the barley in the valleys, as also does the Larrowi. The best male horns I have measure rather more than 36 cm. along the curve.